

**AMENDMENTS TO THE ABSTRACT:**

Method and apparatus are disclosed provided for collecting and separating whole blood into one or more components. A disposable blood separation fluid circuit is provided ~~which is adapted to cooperate~~ for use with a reusable separation controller. The fluid circuit includes a fluid flow path for communication with a blood source and an initial collection chamber in fluid communication with the fluid flow path. The fluid flow path is connected to a blood source; and a quantity of whole blood is collected from the source in the initial collection container. The source is then disconnected from the disposable fluid circuit. The disposable fluid circuit ~~is mounted in association~~ operates with the reusable controller and the collected blood is processed through the disposable fluid circuit assembly to separate it into the desired components.